

AIR FLOW SYSTEM AND METHOD FOR FACILITATING COOLING OF STACKED ELECTRONICS COMPONENTS

Abstract of the Disclosure

An air flow system and method are provided which include a duct configured to mount either as an inlet or outlet duct to an electronics rack. When mounted to cover an air-intake side of the electronics rack, a supply air flow plenum is defined for directing conditioned air to the air-intake side. The duct includes a first air inlet at a first end for receiving the conditioned air, and is tapered from the first end to a second end thereof, with the supply plenum having a varying air flow cross-section. The duct further includes a second air inlet for providing supplemental room air to the plenum. The second inlet is disposed adjacent to the first inlet, thereby facilitating mixing of conditioned air with room air within the supply air flow plenum prior to delivery thereof to the air-intake side of the electronics rack.